

What is claimed is:

1. A laser measurement apparatus comprising:

a measuring laser beam generating means for outputting a measuring laser beam used to measure a characteristic of an object to be measured;

an optical guiding means for controlling the direction in which the measuring laser beam travels;

a measuring means for measuring the property of the object to be measured using the measuring laser beam returning from the object to be measured;

a position detecting means for detecting the position of an object to be tracked; and

a control means for controlling the optical guiding means so that the measuring laser beam is radiated to the object to be tracked based on the position of the object to be tracked detected by the position detecting means; wherein

the measuring means measures the property of the object to be measured using the measuring laser beam returning from the object to be measured in a state where the measuring laser beam is controlled to be radiated to the object to be measured.

2. The laser measurement apparatus according to claim 1, wherein the position detecting means comprises a tracking laser generating means for radiating a tracking laser beam to the object to be tracked via the optical guiding means, and an optical position sensitive detector for detecting the tracking laser

beam returning via the optical guiding means from the object to be tracked; and

the control means controls the optical guiding means so that the tracking laser beam returning from the object to be tracked is returned to a predetermined position of the optical position sensitive detector.

3. The laser measurement apparatus according to claim 1, wherein the optical guiding means includes an optical fiber cable.

4. The laser measurement apparatus according to claim 1, wherein the position detecting means has a color identification device that detects a predetermined color via the optical guiding means, and the control means controls the optical guiding means so that the object to be tracked having the predetermined color is detected by the color identification device.

5. The laser measurement apparatus according to claim 1, wherein the position detecting means has a sound detecting means for detecting a loudness and direction of a sound, and the control means controls the optical guiding means so that a predetermined sound set as the object to be tracked is detected by the sound detecting means.

6. The laser measurement apparatus according to claim 5,

further comprising an intimidating means for intimidating the direction from which the sound is detected when the sound detecting means detects the loudness and direction of a predetermined sound.

7. The laser measurement apparatus according to claim 2, wherein the optical guiding means includes an optical fiber cable.